



State of Utah

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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DOUG
MINERALS PROGRAM
FILE COPY

October 2, 1989

TO: Wayne Hedberg, Permit Lead

FROM: Scott Johnson, Reclamation Engineer *Scott*

RE: Revised Reclamation Estimate for North Lily Mining Company, Tintic Project, M/023/007, Juab County, Utah

I have completed my review of the expansion amendment for the Tintic Project. The engineering work appears to be technically sound. Assuming the tailings pile north of the plant facilities is regraded and ready to seed, the adjusted reclamation estimate is \$122,000 in 1994 dollars.

North Lily initiated a deposit on March 15, 1988 in First Security Bank for the amount of \$92,522.67. As of today, this account has a value of \$104,813.09. This account matures on March 15, 1991 with a value exceeding \$115,000.

Since the operator has initiated reclamation by restoring the tailings pad, I suggest we leave the surety alone. If the revegetation is successful by the 1991 deposit maturity date, the value of the deposit will be in line with the 1994 reclamation cost (\$122,000 minus \$6,000).

jb
cc: Lowell Braxton
Holland Shepherd
MN17/74

Reclamation Estimate for North Lily Mining Company
Tintic Project Juab County M/023/007

Prepared By Utah State Division of Oil, Gas and Mining
October 2, 1989

Description	Quantity	Unit	\$/Unit	Cost (\$)
Plant Site Reclamation				
Demolish and Dispose of Buildings		Lump Sum		5,000
Regrade Building Site	1.0	Acres	300	300
Decommission Heap Leach Pad	13.0	Acres	500	6,500
Regrade Heap Leach Pad	120,000	Cubic Yards	0.20	24,000
Regrade Solution Ponds	12,000	Acres	0.20	2,400
Apply Topsoil	29,400	Acres	1.25	36,750
Revegetate	21.0	Acres	447	9,390
Subtotal				84,340
North Tailings Dump Reclamation				
Revegetate (a)	11.1	Acres	447	4,960
Mammoth Mine Dump Reclamation				
Grade for Uniformity	15.0	Acres	300	4,500
Revegetate	15.0	Acres	447	6,710
Subtotal				11,210
Totals				100,510
Add Contingency (10%)				10,050
TOTAL RECLAMATION COST (1989 Dollars)				110,560
TOTAL RECLAMATION COST (1994 Dollars) @ 1.93% Annual Inflation				122,000

Notes: (a) This area has been depleted of ore. The reclamation earthwork was completed in 1989. The revegetation remains and will commence during the fall of 1989.

This estimate includes the reclamation costs required for the expansion of the heap leach pad.

Reclamation Estimate for North Lily Mining Company
Tintic Project Juab County M/023/007

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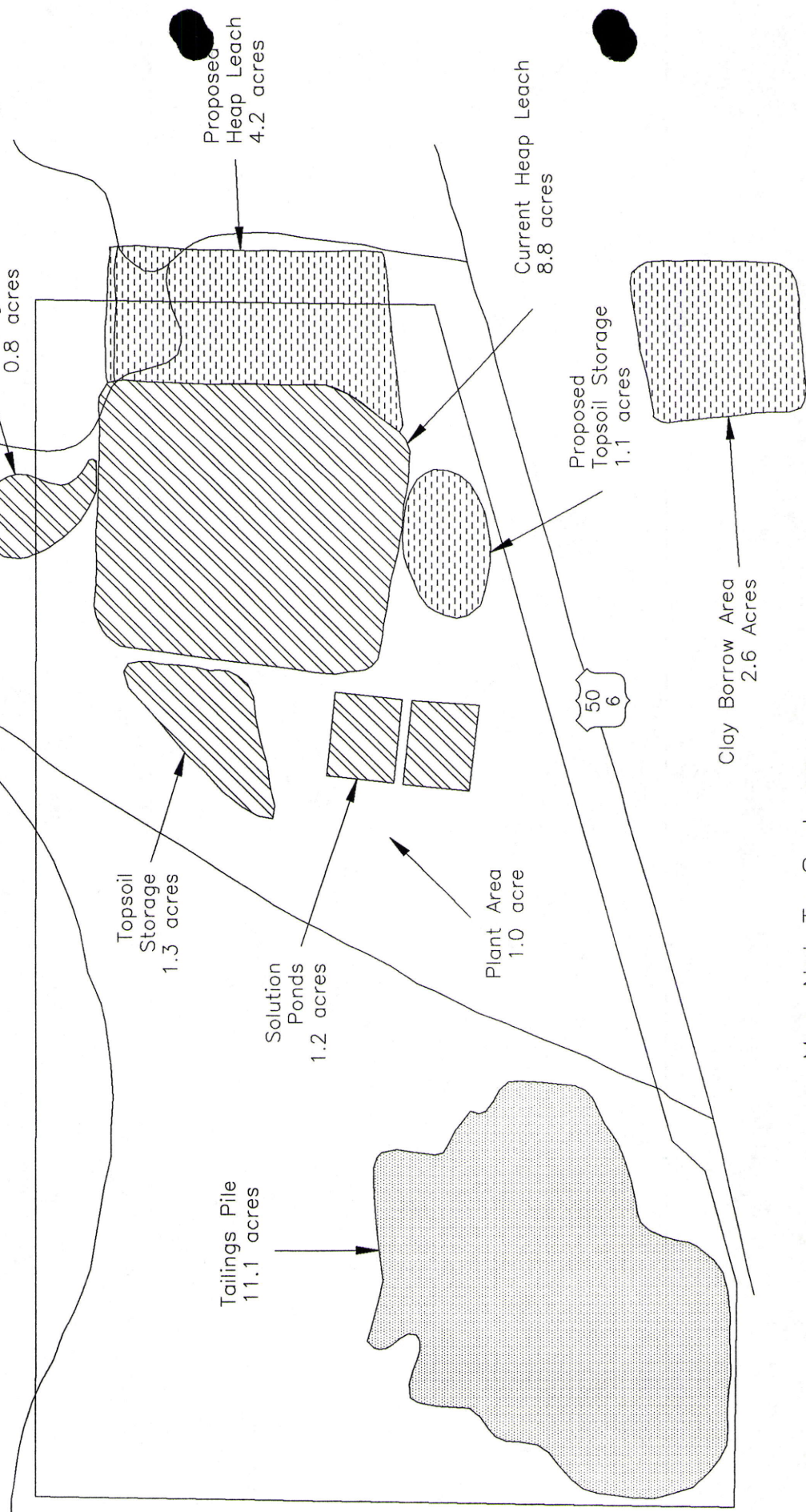
Cost Parameters Used

D-8 Dozer (0&0)	160	\$/hour
988B Wheel Loader (0&0)	165	\$/hour
Labor Only	24	\$/hour
Farm Tractor (0&0)	67	\$/hour
Speed	4	mph
Width of Pass	6	feet

Revegetation Cost per Acre	Quantity	Unit	\$/Unit	Total Cost (\$)
Bare Costs				
Fertilizer (18-46-0)	100	Pounds	0.25	25
Seed Mix	20	Pounds	9	180
Native Hay Mulch	2	Tons	50	100
Seed Mix (drilled)	0.5	Hours	24	12
Subtotal				----- 317
Application Costs				
Native Hay Mulch (spread by hand)	3.0	Hours	24	72
Native Hay Mulch (disc into ground)	0.3	Hours	67	23
Fertilizer (broadcast by hand)	0.5	Hours	24	12
Seed Mix (drilled)	0.5	Hours	0	0
Scarify (tractor with chain)	0.3	Hours	67	23
Subtotal				----- 130
Total Revegetation Cost per Acre				447



Note: This map does not include the 15 acre Mammoth Mine Dump.



Map Not To Scale

- Existing Disturbance
- Proposed Expansion (except Mammoth)
- Reclaimed Area (except vegetation)

Map Compiled 9-29-89

North Lily Mining Company
M/023/007
Juab County, Utah

